

Title (en)  
SPIRAL CURVE BASED VERTICAL PARKING PLANNER SYSTEM FOR AUTONOMOUS DRIVING VEHICLES

Title (de)  
AUF SPIRAALKURVE BASIERENDES VERTIKALES PARKPLANUNGSSYSTEM FÜR AUTONOM FAHRENDE FAHRZEUGE

Title (fr)  
SYSTÈME DE PLANIFICATION DE STATIONNEMENT VERTICAL FONDÉ SUR UNE COURBE EN SPIRALE POUR VÉHICULES À CONDUITE AUTONOME

Publication  
**EP 3694756 A1 20200819 (EN)**

Application  
**EP 18908287 A 20181226**

Priority  
CN 2018123965 W 20181226

Abstract (en)  
[origin: WO2020132959A1] A path for parking is planned in operating an autonomous driving vehicle (ADV). The operations comprises: determining a plurality of sample points; determining a plurality of candidate paths connecting a start point and an end point for parking, each of the candidate paths passing through one of the sample points; determining a cost associated with each of the plurality of candidate paths; determining one or more candidate paths from the plurality of candidate paths that meet a boundary check requirement; selecting as the planned path a candidate path associated with a lowest cost that meets the boundary check requirement; determining a speed profile based on the planned path and an environment of the ADV; and generating driving signals based at least in part on the speed profile to control operations of the ADV to perform parking along the planned path.

IPC 8 full level  
**B60W 30/06** (2006.01); **B62D 15/02** (2006.01); **G08G 1/16** (2006.01)

CPC (source: EP US)  
**B60W 30/06** (2013.01 - EP US); **B60W 60/001** (2020.02 - US); **B62D 15/0285** (2013.01 - EP); **G01C 21/3453** (2013.01 - US); **G01C 21/3461** (2013.01 - EP); **G01C 21/3605** (2013.01 - US); **G06V 20/56** (2022.01 - US); **G08G 1/0112** (2013.01 - EP); **G08G 1/0129** (2013.01 - EP); **G08G 1/0145** (2013.01 - EP); **G08G 1/14** (2013.01 - US); **G08G 1/168** (2013.01 - EP)

Cited by  
CN112498366A

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2020132959 A1 20200702**; CN 111615476 A 20200901; CN 111615476 B 20230523; EP 3694756 A1 20200819; EP 3694756 A4 20200819; EP 3694756 B1 20211117; JP 2021511998 A 20210513; JP 7149288 B2 20221006; US 11180160 B2 20211123; US 2021188307 A1 20210624

DOCDB simple family (application)  
**CN 2018123965 W 20181226**; CN 201880018112 A 20181226; EP 18908287 A 20181226; JP 2019555234 A 20181226; US 201816314371 A 20181226